

**CITY OF SCOTTSDALE
PLANNING & DEVELOPMENT SERVICES DEPARTMENT**

**INTERPRETATIONS & APPLICATIONS
OF BUILDING CODES & REGULATIONS 08-1**



CODE SECTION : IECC Section 502.1.1

1/25/08

SUBJECT : ENERGY EFFICIENCY REQUIREMENTS IN COMMERCIAL BUILDINGS

The 2006 International Energy Conservation Code (IECC), Section 502.1.1 "Insulation and Fenestration Criteria" has been amended to read as follows:

502.1.1 Insulation and fenestration criteria. Building thermal envelope compliance (sections 502.2 and 502.3) shall be demonstrated by passing COMcheck energy compliance software with a score at least 15% above the IECC. Buildings with a vertical fenestration area or skylight area that exceeds that allowed in Table 502.3 shall comply with either the Total Building Performance provisions (Section 506) of the IECC or the Building Envelope Trade-Off Option (Section 5.6) of ASHRAE/IESNA 90.1"

Any one of the following methods will ensure compliance with this code section:

1. COMcheck report demonstrating a minimum 15% passing score for the building envelope. COMcheck is a trade off approach using the UA values of the building envelope with options for building orientation and exterior shading.
2. Total building energy performance analysis demonstrating a minimum 15% energy cost savings per Section 506 of the IECC or Section 11 of ASHRAE 90.1-2004. A total building energy analysis (building performance) accounts for building envelope, mechanical systems, water heating and lighting loads.
3. Building Envelope Trade-Off Option demonstrating a minimum 15% improved performance per Section 5.6 of ASHRAE/IESNA 90.1-2004.

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